

Detailed System Design

<i>Version/ Review Date</i>	<i>Brief Summary of Changes From Prior Version</i>
Version 1.0 9/12/2003	<ul style="list-style-type: none">▪ Original to Departments
Version 2.0 04/09/2004	<ul style="list-style-type: none">▪ P3: Updated the Document Usage section to account for VCMT records▪ P7: Added a new field to the VC_DOC_HDR component to provide departments with the original VCUST ID when a duplicate TIN and TIN Type are interfaced▪ P9: Updated examples and added a new one for Duplicate TIN and TIN Type entities.

DDCT18- Outbound Vendor Customer Return Interface

Table of Contents

1.	Overview	3
1.1.	XML Definitions and Conventions.....	3
1.2.	Document Usage	3
1.3.	Logical Document Component Structure.....	4
2.	Publishable Specifications	5
2.1.	Transaction Layout: Resulting Vendor Customer Return XML File	5
2.1.1	AMS_DOCUMENT root element attributes.....	5
2.1.2	Document Component: VC_DOC_VCUST.....	6
2.1.3	Document Component: VC_DOC_AD	8
2.1.4	Example 1 – XML layout for new Vendor (result from VCC document)	9
2.1.5	Example 2 – XML layout for VCC where TIN and TIN Type are duplicates.....	10
2.1.6	Example 3 – XML layout for existing Customer with a new address & contact (VCMT).....	12

1. Overview

1.1. XML Definitions and Conventions

- Root - The NewMMARS XML file and document root declaration identifies required root elements that must be included for the XML file or document (transaction) to be loaded into NewMMARS. The NewMMARS XML file must contain a single root element that contains specified attributes, at the file level. Each document transactions contained within the XML file must also contain a root element that contains the specified attributes, at the document level. This structure is retained within the returned file for consistency.
- Attributes - Attributes are name-value pairs that occur inside start-tags after the element name.
- Elements - Elements are the most common form of markup. Delimited by angle brackets, most elements identify the nature of the content they surround. Elements normally begin with a start-tag, <element>, and end with an end-tag, </element>.
- CDATA Tags - In a document, CDATA instructs the parser to ignore (most) markup characters. Between the start of the section, <![CDATA[and the end of the section,]]>, all character data is passed directly to the application, without interpretation. Elements, entity references, comments, and processing instructions are all unrecognized and the characters that comprise them are passed “literally” to the application.

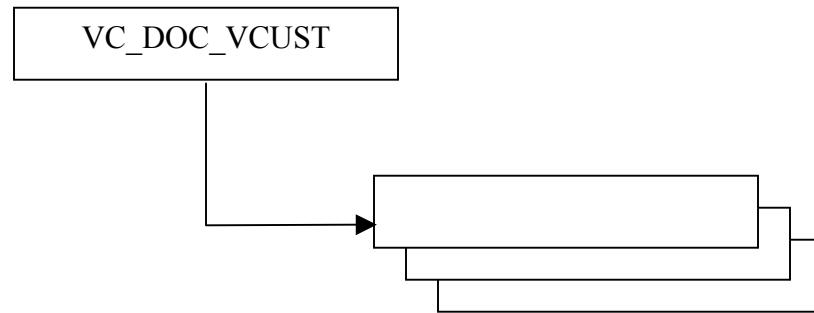
1.2. Document Usage

As a result of a submitted Vendor Customer Creation (VCC) Interface document (and possibility Vendor Customer Modification (VCM document), an Outbound Vendor Customer Return Interface file will be returned to the originating department. The purpose of this XML-based file is to return back to the originating department the identifying codes (Vendor/Customer ID, Address ID and Contact ID) that are auto generated within the NewMMARS systems. For the convenience of the originating departments, additional fields (Last Name, TIN, etc.) will be also returned back to originating department (these additional fields could be used for visual aid for verification of mapping department document id to generated NewMMARS ids).

This return file for VCC transactions will use the same DOC_CAT, DOC_TYP, DOC_CD, DOC_DEPT_CD and DOC_ID as the originating document.

The return file for VCMT transactions will use the same DOC_CAT, DOC_TYP, DOC_CD, DOC_DEPT_CD and DOC_ID on the VCM document generated from the interfaced VCMT records. The Tracking Number will be returned in the VC_DOC_VCUST component.

1.3. Logical Document Component Structure



2. Publishable Specifications

2.1. Transaction Layout: Resulting Vendor Customer Return XML File

		Component Description
Document Component		
	<u>AMS DOCUMENT</u>	XML file root element
	<u>VC DOC VCUST</u>	Vendor Customer
	<u>VC DOC AD</u>	Address Information

2.1.1 AMS_DOCUMENT root element attributes

Attribute	Caption	Description	Type	Size	NewMMARS Notes
DOC_CAT	Document Category	The category in which the document is located.	VarChar	8	Value: VCUST
DOC_TYP	Document Type	The type of document, defined in the Document Type table. Each document code must be assigned a document type.	VarChar	8	As supplied by originating department for VCC Values: - VCC - VCM
DOC_CD	Document Code	The alpha-numeric identification code assigned to the document on the Document Control table. Each document code must be unique within the application. The document code is a required field when creating a new document. It also may be a selection criteria on a parameter table, a key to a specific business rule on a control table, or the document code recorded on a historical record.	VarChar	8	As supplied by originating department for VCC Values: - VCC - VCM
DOC_ID	Document Id	The department code assigned to this document.	VarChar	20	As supplied by originating department for VCC. For VCMT, system generated ID is returned.

Attribute	Caption	Description	Type	Size	NewMMARS Notes
DOC_DEPT_CD	Department Code	The document code and number that is either manually assigned or automatically generated by the system if you do not enter this information. The version number is assigned automatically. Duplicate document identification numbers are not allowed in the system.	VarChar	4	As supplied by originating department
DOC_UNIT_CD	Unit Code	The unit code associated with this document.	VarChar	4	As supplied by originating department

2.1.2 Document Component: VC_DOC_VCUST

Attribute	Caption	Description	Type	Size	NewMMARS Notes
DOC_CAT	Document Category	The category in which the document is located.	VarChar	8	Value: VCUST
DOC_TYP	Document Type	The type of document, defined in the Document Type table. Each document code must be assigned a document type.	VarChar	8	As supplied by originating department for VCC Values: - VCC - VCM
DOC_CD	Document Code	The alpha-numeric identification code assigned to the document on the Document Control table. Each document code must be unique within the application. The document code is a required field when creating a new document. It also may be a selection criteria on a parameter table, a key to a specific business rule on a control table, or the document code recorded on a historical record.	VarChar	8	As supplied by originating department for VCC Values: - VCC - VCM
DOC_ID	Document Id	The department code assigned to this document.	VarChar	20	As supplied by originating department for VCC. For VCMT, system generated ID is returned.
DOC_DEPT_CD	Department Code	The document code and number that is either manually assigned or automatically generated by the system if you do not enter this information. The version number is assigned automatically. Duplicate document identification numbers are not allowed in the system.	VarChar	4	As supplied by originating department
DOC_UNIT_CD	Unit Code	The unit code associated with this document.	VarChar	4	As supplied by originating department
ORG_TYP	Organization Type	The type of the organization. Valid values are Individual or Company.	Integer		As supplied by originating department. Will be null for VCM document.
FRST_NM	First Name	For Customers, this is the Customer's First Name.	VarChar	14	As supplied by originating department. Will be null for VCM document.
MID_NM	Middle Name	For Customers, this is the Customer's Middle Name.	VarChar	14	As supplied by originating department. Will be null for VCM document.

Attribute	Caption	Description	Type	Size	NewMMARS Notes
LAST_NM	Last Name	For Customers, this is the Customer's Last Name.	VarChar	30	As supplied by originating department. Will be null for VCM document.
COMP_NM	Company Name	For Vendors, this is the Vendor's Company Name.	VarChar	60	As supplied by originating department. Will be null for VCM document.
TIN	Taxpayer ID Number	The taxpayer identification number from the 1099 Reporting Information page. If a valid code is not available on the 1099 Reporting Information page, one must be added.	VarChar	9	As supplied by originating department. Will be null for VCM document.
TIN_TYP	Taxpayer ID Number Type	The type associated with the taxpayer identification number. For example: SSN, FEIN, and Not Applicable.	VarChar	1	As supplied by originating department. Will be null for VCM document.
VEND_CUST_CD	Vendor Customer Code	The unique identifier assigned to the vendor/customer. In ADVANTAGE Financial, a vendor can also be a customer, allowing you to enter information only one time when a particular contact is both a vendor (payable) and a customer (receivable).	VarChar	20	If VCC: As supplied by NewMMARS If VCM As supplied by originating department
ORG_VEND_CUST_CD	Original Vendor Customer Code	The unique identifier assigned to the vendor/customer. In ADVANTAGE Financial, a vendor can also be a customer, allowing you to enter information only one time when a particular contact is both a vendor (payable) and a customer (receivable).	VarChar	20	This field is only populated for VCC transactions when the interfaced TIN and TIN Type are duplicates of an existing entity in the system. In such a case, the Vendor Customer Return file will contain both the VEND_CUST_CD and the ORG_VEND_CUST_CD.
TRCK_NO	Tracking Number	The Tracking Table will provide an attribute for Tracking Number. The Tracking Number is used to group changes to vendor customer information. For changes submitted via interface, the interfacing department assigns the Tracking Number on the XML file. One VCM document will correspond to one prefix and tracking number.	Varchar	20	This field is only provided for VCMT return files.

2.1.3 Document Component: VC_DOC_AD

Attribute	Caption	Description	Type	Size	NewMMARS Notes
DOC_CAT	Document Category	The category in which the document is located.	VarChar	8	Value: VCUST
DOC_TYP	Document Type	The type of document, defined in the Document Type table. Each document code must be assigned a document type.	VarChar	8	As supplied by originating department for VCC Values: - VCC - VCM
DOC_CD	Document Code	The alpha-numeric identification code assigned to the document on the Document Control table. Each document code must be unique within the application. The document code is a required field when creating a new document. It also may be a selection criteria on a parameter table, a key to a specific business rule on a control table, or the document code recorded on a historical record.	VarChar	8	As supplied by originating department for VCC Values: - VCC - VCM
DOC_ID	Document Id	The department code assigned to this document.	VarChar	20	As supplied by originating department for VCC. For VCMT, system generated ID is returned.
DOC_DEPT_CD	Department Code	The document code and number that is either manually assigned or automatically generated by the system if you do not enter this information. The version number is assigned automatically. Duplicate document identification numbers are not allowed in the system.	VarChar	4	As supplied by originating department
DOC_UNIT_CD	Unit Code	The unit code associated with this document.	VarChar	4	As supplied by originating department
DOC_AD_LN_NO	Address Line Number	The address line number visible to a user that uniquely identifies each address line for the VCUST record	Integer		As supplied by originating department
AD_TYP	Address Type	Indicates the type of address.	VarChar	2	As supplied by originating department
AD_ID	Address ID	The Address Code or ID given to a unique address for a vendor or customer. The use of different Address Codes will allow a single vendor or customer code to have multiple addresses.	VarChar	20	As supplied by NewMMARS
STR_1_NM	Street 1	The first line of the street address.	VarChar	75	As supplied by originating department
STR_2_NM	Street 2	The second line of the street address.	VarChar	75	As supplied by originating department
CITY_NM	City	The city name associated with the address.	VarChar	60	As supplied by originating department
ST	Sate/Province	The state or province.	VarChar	2	As supplied by originating department
ZIP	Zip/Postal Code	The zip code associated with the address.	VarChar	10	As supplied by originating department
CNTAC_NO	Principal Contact ID	Contact ID for the principal contact name of the person responsible for questions concerning an associated entity.	VarChar	20	As supplied by NewMMARS

Attribute	Caption	Description	Type	Size	NewMMARS Notes
CNTAC_NM	Principal Contact	The vendor's procurement contact.	VarChar	60	As supplied by originating department

2.1.4 Example 1 – XML layout for new Vendor (result from VCC document)

This example is for a return XML file for a new VCC to add a new vendor code to NewMMARS. The record is for company "NewMMARS Inc.", with EIN "000112222" and two addresses (one procurement and one payment) and one contact.

```

<AMS_DOC_XML_EXPORT_FILE VERSION="1.0">
<AMS_DOCUMENT DOC_CAT="VCUST" DOC_TYP="VCC" DOC_CD="VCC" DOC_DEPT_CD="ABC" DOC_UNIT_CD="1000"
DOC_ID="INTF_2004_0000000001" >
<VC_DOC_VCUST AMSDataObject="Y">
<DOC_CAT><![CDATA[VCUST]]></DOC_CAT>
<DOC_TYP><![CDATA[VCC]]></DOC_TYP>
<DOC_CD><![CDATA[VCC]]></DOC_CD>
<DOC_ID><![CDATA[INTF_2004_0000000001]]></DOC_ID>
<DOC_DEPT_CD><![CDATA[ABC]]></DOC_DEPT_CD>
<DOC_UNIT_CD><![CDATA[1000]]></DOC_UNIT_CD>
<ORG_TYP><![CDATA[2]]></ORG_TYP>
<FRST_NM><![CDATA[null]]></FRST_NM>
<MID_NM><![CDATA[null]]></MID_NM>
<LAST_NM><![CDATA[null]]></LAST_NM>
<COMP_NM><![CDATA[NewMMARS Inc.]]></COMP_NM>
<TIN><![CDATA[000112222]]></TIN>
<TIN_TYP><![CDATA[1]]></TIN_TYP>
<VEND_CUST_CD><![CDATA[VC1234567890]]></VEND_CUST_CD>
<ORG_VEND_CUST_CD><![CDATA[null]]></ORG_VEND_CUST_CD>
<TRCK_NO><![CDATA[null]]></TRCK_NO>
</VC_DOC_VCUST>
<VC_DOC_AD AMSDataObject="Y">
<DOC_CAT><![CDATA[VCUST]]></DOC_CAT>
<DOC_TYP><![CDATA[VCC]]></DOC_TYP>
<DOC_CD><![CDATA[VCC]]></DOC_CD>
<DOC_ID><![CDATA[INTF_2004_0000000001]]></DOC_ID>
<DOC_DEPT_CD><![CDATA[ABC]]></DOC_DEPT_CD>
<DOC_AD_LN_NO><![CDATA[1]]></DOC_AD_LN_NO>
```

```

<DOC_UNIT_CD><![CDATA[1000]]></DOC_UNIT_CD>
<AD_TYP><![CDATA[PR]]></AD_TYP>
<AD_ID><![CDATA[AD001]]></AD_ID>
<STR_1_NM><![CDATA[One Ashburton]]></STR_1_NM>
<STR_2_NM><![CDATA[null]]></STR_2_NM>
<CITY_NM><![CDATA[Boston]]></CITY_NM>
<ST><![CDATA[MA]]></ST>
<ZIP><![CDATA[02108]]></ZIP>
<CNTAC_NO><![CDATA[PC001]]></CNTAC_NO>
<CNTAC_NM><![CDATA[John Smith]]></CNTAC_NM>
</VC_DOC_AD>
<VC_DOC_AD AMSDataObject="Y">
  <DOC_CAT><![CDATA[VCUST]]></DOC_CAT>
  <DOC_TYP><![CDATA[VCC]]></DOC_TYP>
  <DOC_CD><![CDATA[VCC]]></DOC_CD>
  <DOC_ID><![CDATA[INTF_2004_0000000001]]></DOC_ID>
  <DOC_DEPT_CD><![CDATA[ABC]]></DOC_DEPT_CD>
  <DOC_AD_LN_NO><![CDATA[2]]></DOC_AD_LN_NO>
  <DOC_UNIT_CD><![CDATA[1000]]></DOC_UNIT_CD>
  <AD_TYP><![CDATA[PA]]></AD_TYP>
  <AD_ID><![CDATA[AD002]]></AD_ID>
  <STR_1_NM><![CDATA[One Ashburton PI]]></STR_1_NM>
  <STR_2_NM><![CDATA[null]]></STR_2_NM>
  <CITY_NM><![CDATA[Boston]]></CITY_NM>
  <ST><![CDATA[MA]]></ST>
  <ZIP><![CDATA[02108]]></ZIP>
  <CNTAC_NO><![CDATA[null]]></CNTAC_NO>
  <CNTAC_NM><![CDATA[null]]></CNTAC_NM>
</VC_DOC_AD>
</AMS_DOCUMENT>
</AMS_DOC_XML_EXPORT_FILE>

```

2.1.5 Example 2 – XML layout for VCC where TIN and TIN Type are duplicates

This example is for a return XML file for a new VCC where the TIN and TIN Type are duplicates. The return file will return the system generated codes as well as the Vendor/Customer Code of the original entity.

```
<AMS_DOC_XML_EXPORT_FILE VERSION="1.0">
```

```

<AMS_DOCUMENT DOC_CAT="VCUST" DOC_TYP="VCC" DOC_CD="VCC" DOC_DEPT_CD="ABC" DOC_UNIT_CD="1000"
DOC_ID="INTF_2004_0000000005" >
<VC_DOC_VCUST AMSDataObject="Y">
<DOC_CAT><![CDATA[VCUST]]></DOC_CAT>
<DOC_TYP><![CDATA[VCC]]></DOC_TYP>
<DOC_CD><![CDATA[VCC]]></DOC_CD>
<DOC_ID><![CDATA[INTF_2004_0000000005]]></DOC_ID>
<DOC_DEPT_CD><![CDATA[ABC]]></DOC_DEPT_CD>
<DOC_UNIT_CD><![CDATA[1000]]></DOC_UNIT_CD>
<ORG_TYP><![CDATA[1]]></ORG_TYP>
<FRST_NM><![CDATA[Robert]]></FRST_NM>
<MID_NM><![CDATA[null]]></MID_NM>
<LAST_NM><![CDATA[Smith]]></LAST_NM>
<COMP_NM><![CDATA[null]]></COMP_NM>
<TIN><![CDATA[000112233]]></TIN>
<TIN_TYP><![CDATA[2]]></TIN_TYP>
<VEND_CUST_CD><![CDATA[VC0000000432]]></VEND_CUST_CD>
<ORG_VEND_CUST_CD><![CDATA[VC0000000112]]></ORG_VEND_CUST_CD>
<TRCK_NO><![CDATA[null]]></TRCK_NO>
</VC_DOC_VCUST>
<VC_DOC_AD AMSDataObject="Y">
<DOC_CAT><![CDATA[VCUST]]></DOC_CAT>
<DOC_TYP><![CDATA[VCC]]></DOC_TYP>
<DOC_CD><![CDATA[VCC]]></DOC_CD>
<DOC_ID><![CDATA[INTF_2004_0000000005]]></DOC_ID>
<DOC_DEPT_CD><![CDATA[ABC]]></DOC_DEPT_CD>
<DOC_AD_LN_NO><![CDATA[1]]></DOC_AD_LN_NO>
<DOC_UNIT_CD><![CDATA[1000]]></DOC_UNIT_CD>
<AD_TYP><![CDATA[PR]]></AD_TYP>
<AD_ID><![CDATA[AD001]]></AD_ID>
<STR_1_NM><![CDATA[128 Church Street]]></STR_1_NM>
<STR_2_NM><![CDATA[null]]></STR_2_NM>
<CITY_NM><![CDATA[Cambridge]]></CITY_NM>
<ST><![CDATA[MA]]></ST>
<ZIP><![CDATA[02138]]></ZIP>
<CNTAC_NO><![CDATA[PC001]]></CNTAC_NO>
<CNTAC_NM><![CDATA[Robert Smith]]></CNTAC_NM>
</VC_DOC_AD>

```

```
</AMS_DOCUMENT>
</AMS_DOC_XML_EXPORT_FILE>
```

2.1.6 Example 3 – XML layout for existing Customer with a new address & contact (VCMT)

This example is of a return XML file for a VCM modifying an existing NewMMARS customer VC9871234560, "Joyce L. Wang" in order to create a new addresses and new contact. The Tracking Number used was 0402200400001.

```
<AMS_DOC_XML_EXPORT_FILE VERSION="1.0">
<AMS_DOCUMENT DOC_CAT="VCUST" DOC_TYP="VCM" DOC_CD="VCM" DOC_DEPT_CD="ABC" DOC_UNIT_CD="1000"
DOC_ID="INTF_2004_0000000002" >
<VC_DOC_VCUST AMSDataObject="Y">
<DOC_CAT><![CDATA[VCUST]]></DOC_CAT>
<DOC_TYP><![CDATA[VCM]]></DOC_TYP>
<DOC_CD><![CDATA[VCM]]></DOC_CD>
<DOC_ID><![CDATA[INTF_2004_0000000002]]></DOC_ID>
<DOC_DEPT_CD><![CDATA[ABC]]></DOC_DEPT_CD>
<DOC_UNIT_CD><![CDATA[1000]]></DOC_UNIT_CD>
<ORG_TYP><![CDATA[null]]></ORG_TYP>
<FRST_NM><![CDATA[null]]></FRST_NM>
<MID_NM><![CDATA[null]]></MID_NM>
<LAST_NM><![CDATA[null]]></LAST_NM>
<COMP_NM><![CDATA[null]]></COMP_NM>
<TIN><![CDATA[null]]></TIN>
<TIN_TYP><![CDATA[null]]></TIN_TYP>
<VEND_CUST_CD><![CDATA[VC9871234560]]></VEND_CUST_CD>
<ORG_VEND_CUST_CD><![CDATA[null]]></ORG_VEND_CUST_CD>
<TRCK_NO><![CDATA[INTF0402200400001]]></TRCK_NO>
</VC_DOC_VCUST>
<VC_DOC_AD AMSDataObject="Y">
<DOC_CAT><![CDATA[VCUST]]></DOC_CAT>
<DOC_TYP><![CDATA[VCM]]></DOC_TYP>
<DOC_CD><![CDATA[VCM]]></DOC_CD>
<DOC_ID><![CDATA[INTF_2004_0000000002]]></DOC_ID>
<DOC_DEPT_CD><![CDATA[ABC]]></DOC_DEPT_CD>
<DOC_AD_LN_NO><![CDATA[1]]></DOC_AD_LN_NO>
<DOC_UNIT_CD><![CDATA[1000]]></DOC_UNIT_CD>
```

```
<AD_TYP><![CDATA[PR]]></AD_TYP>
<AD_ID><![CDATA[AD001]]></AD_ID>
<STR_1_NM><![CDATA[123 Main St]]></STR_1_NM>
<STR_2_NM><![CDATA[null]]></STR_2_NM>
<CITY_NM><![CDATA[Boston]]></CITY_NM>
<ST><![CDATA[MA]]></ST>
<ZIP><![CDATA[02108]]></ZIP>
<CNTAC_NO><![CDATA[PC001]]></CNTAC_NO>
<CNTAC_NM><![CDATA[Joyce Wang]]></CNTAC_NM>
</VC_DOC_AD>
</AMS_DOCUMENT>
</AMS_DOC_XML_EXPORT_FILE>
```